

PATENT

Serial No. 10/578,071

Amendment in Reply to Office Action of January 7, 2009

IN THE ABSTRACT

Please delete the current Abstract in its entirety and
substitute therefor the enclosed New Abstract.

NEW ABSTRACT

A display includes a display panel and a backlighting system having a light source and waveguide. The waveguide includes diffusing portions of diffusing material. Light propagates through the waveguide by total internal reflection, but may be scattered by the diffusing portions. Scattered light leaving the waveguide through its exit face produces a pattern of light lines for use in illuminating a 3D autostereoscopic image displayed by the display panel. Intervening portions between the diffusing portions, are formed from a material that can be switched between a light transmissive state and a diffusive state. Optical properties of the intervening portions are controlled using electric fields. Such a display is switchable between a 2D image mode, in which the intervening portions are diffusive and the waveguide provides uniform illumination, and a 3D image mode, in which the intervening portions are transmissive and the waveguide provides illumination in the form of light lines.